

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Takashi KONDO et al.

Application No.: 10/040,379

Confirmation No.: 5474

Filed: January 9, 2002

Art Unit: 2168

For: IMAGE DATA RETRIEVAL APPARATUS
AND METHOD CAPABLE OF
FACILITATING RETRIEVAL OF DESIRED
IMAGE DATA FROM IMAGE DATABASE

Examiner: H. Q. Pham

AMENDED APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Notification of Non-Compliant Appeal Brief dated August 16, 2007, appellants submit an amended Appeal Brief, amending Section V, Summary of Claimed Subject Matter.

As required under § 41.37(a), this brief is filed not more than two months after the Notice of Appeal filed in this case on June 19, 2007, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

I.	Real Party In Interest
II	Related Appeals and Interferences
III.	Status of Claims
IV.	Status of Amendments
V.	Summary of Claimed Subject Matter
VI.	Grounds of Rejection to be Reviewed on Appeal
VII.	Argument
VIII.	Claims
IX.	Evidence
X.	Related Proceedings
Appendix A	Claims

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Minolta Co., Ltd.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 4 claims pending in application.

B. Current Status of Claims

1. Claims canceled: 1-22, 25-26
2. Claims withdrawn from consideration but not canceled: none
3. Claims pending: 23-24, 27-28
4. Claims allowed: none
5. Claims rejected: 23, 24, 27, 28

C. Claims On Appeal

The claims on appeal are claims 23, 24, 27, 28

IV. STATUS OF AMENDMENTS

Applicant filed an Amendment After Final Rejection on April 12, 2007. The Examiner responded to the Amendment After Final Rejection in an Advisory Action mailed April 30, 2007. In the Advisory Action, the Examiner indicated that Applicants' proposed amendments to claims 23, 24, 27 and 28, would be entered.

Accordingly, the claims enclosed herein as Appendix A do incorporate the amendments to claims 23, 24, 27 and 28 as indicated in the paper filed by Applicant on April 12, 2007.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed invention relates to image retrieval from a database. An image data retrieval apparatus is shown in Fig. 1 as element 100. The image data retrieval apparatus includes an input unit 101, a controller 103 and a display unit 107. The input unit 101 is used for inputting image data of an image taken with a digital camera (specification, paragraph [0044]). A key image to be retrieved is stored in the image database 105, which has a plurality of face image data stored therein (paragraph [0044]). The display unit 107 displays a selection menu for input, retrieval

results and the like (paragraph [0044]). The controller 103 includes a CPU for registration and retrieval (paragraph [0045]).

If a user selects the image data registration process (Fig. 2, step S205), an image, such as one taken with a digital camera, is registered in the database 105. During an image data retrieval process (Fig. 2, step S207) an object image (a key face) is used to effect a predetermined image data retrieval process.

Fig. 6 of the application shows how a key face is designated by a drag and drop process. A mouse may be positioned on the face of a person in the image and the face image may be cut out and dragged to a key face entry frame (see Fig. 4 and Fig. 6; see also paragraphs [0064] and [0065]). This key face can then be used as a retrieval key to search through the database which has a potentially large number of images stored. The mouse in this example corresponds to the claimed designator of claim 23.

Fig. 7 illustrates the process of retrieving the image using a key face. With reference to Fig. 7, initially at step S701 a face region is cut out from an image stored in image database 105 that is to be searched through (paragraph [0066]). At S703, each face image cut out is compared with the key face input in the condition window (paragraph [0067]). As a result, if a decision is made that there does not exist any face image analogous to the key face (NO at step S705) then the program moves on to step S713. If a decision is made that a face analogous thereto exists (YES at step S705) then the program moves on to step S707 (paragraph [0068]). More than one key face can be used in a search. If all key faces designated are analogous to any one of face images cut out from subject images, then the subject image is extracted as a desired image (paragraph [0073]).

Claim 23 recites an image data retrieval apparatus (element 100 in Fig. 1) comprising a database (element 105) for registering a plurality of images, a display unit (107) for displaying an image registered in the database, a designator (mouse pointer, not shown, see paragraph [0061]) for designating an image area of the registered image displayed on the display unit; and a controller (104) for cutting out image data corresponding to the designated image area of the registered image

and retrieving a desired image data containing image data which is identical or analogous to the image data cut out from the database.

Claim 27 recites an image data retrieval method comprising registering a plurality of images in a database (para. [0074] and S205 in Fig. 2); displaying an image registered in the database on a display unit (para. [0056] and S313 in Fig. 3); designating an image area of the registered image displayed on the display unit (para. [0060] and S309 in Fig. 3); cutting out image data corresponding to the designated image area of the registered image (para. [0061] and S500 in Fig. 5); and retrieving a desired image containing image data which is identical or analogous to the image data cut out from the registered image (para. [0073] and S711 in Fig. 7).

Claim 28 recites a machine-readable medium having program code stored thereon which, when executed by a machine, causes the machine to perform a method for retrieving image data from an image database, the method executed by said machine comprising registering a plurality of images in a database (para. [0074] and S205 in Fig. 2); displaying an image registered in the database on a display unit (para. [0056] and S313 in Fig. 3); designating an image area of the registered image displayed on the display unit (para. [0060] and S309 in Fig. 3); cutting out image data corresponding to the designated image area of the registered image (para. [0061] and S500 in Fig. 5); and retrieving a desired image containing image data which is identical or analogous to the image data cut out from the registered image (para. [0073] and S711 in Fig. 7).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I. The rejection of claims 23, 24, 27 and 28 under 35 USC 102(e) as being anticipated by Kinjo, U.S. Patent 6,813,395, should be reversed.

VII. ARGUMENT

First, appellants note that the Advisory Action dated April 30, 2007 indicates that only the 35 USC 102(e) rejection has been maintained. Thus, appellants submit that the 35 USC 112, first and second paragraph rejections are overcome in view of the claim amendments made in the

after-final Amendment filed on April 12, 2007, and entered by the Examiner as a result of the Notice of Appeal filed June 19, 2007.

Claim 23 recites “a controller for cutting out image data corresponding to the designated image area of the registered image and retrieving a desired image data containing image data which is identical or analogous to the image data cut out from the database.” Appellants submit that Kinjo fails to teach or suggest this feature.

Kinjo teaches an image searching method where a user designates a searching pattern 20 (see Fig. 2 and col. 10, lines 36-45). As shown in Fig. 3, predetermined specific geometric figures (e.g., circles, triangles and rectangles) are extracted from the original image 10 in Fig. 1 (col. 10, lines 45-51). Kinjo discloses that the designated searching pattern 20 shown in Fig. 2 may be combinations of different specific figures (col. 11, lines 43-45).

The process of searching through images on the basis of the stored data in accordance with the image searching method of Kinjo's invention is described in connection with Fig. 5. According to Kinjo, the designated searching pattern 20 is input as a searching condition. The input original image is read from the database and compared for verification with the designated searching pattern (col. 13, lines 44-54).

Kinjo does not teach or suggest that cutting out image data corresponding to the designated image area of the registered image and retrieving a desired image data containing image data which is identical or analogous to the image data cut out from the database. In other words, Kinjo does not cut out image data of a stored image and retrieve an image which is identical or analogous to the image data cut out. Rather, Kinjo extracts figures which have a shape which matches elements of an image, but does not actually cut out image data which corresponds to a designated area of an image. The shapes used as the key to searching the images in the database, but these shapes are not actual registered image data.

In the Action dated January 25, 2007, the Examiner asserted that Kinjo's circles, triangles and rectangles correspond to registered image data, and thus Kinjo teaches "cutting out image data corresponding to the registered image."

In response, appellants submitted that claim 23 defines that the registered image refers to the image displayed on the display unit. Appellants submitted that the image displayed on the display in Kinjo is the original image data, and thus, the shapes disclosed in Kinjo can not possibly correspond to the registered image data. Appellants also submitted that Kinjo's "original image data" (see Fig. 4) corresponds to the claimed image data corresponding to the registered image. The shapes referred to in Table 1 do not correspond to image data of the registered image *which is displayed on the display unit*.

The key difference between the claimed invention and Kinjo's method is that Kinjo uses shapes that correspond to the original image data as the key for searching the images and the claimed invention uses actual image data cut out of the original image for searching the database. The Examiner continues to assert that the triangles, circles, rectangles, etc. are image data that is cut out but appellant maintains that these are merely shapes which match the image data, but no actual image data is being cut out. In other words, a triangle may correspond to a mountain, but it is not the mountain which is being used as the key for searching the database in Kinjo's method (which is essentially what appellant has claimed), it is the shape of a triangle and the corresponding information which helps to form that triangle (see coordinates in Table 1 in col. 13 of Kinjo) which is being used as the key for searching the database.

Thus, for at least these reasons, Kinjo fails to teach or suggest the features of claim 23.

Claim 24 recites that "the image corresponding to the image area is an image of a face of a person." Kinjo fails to teach or suggest this feature. At best, Kinjo would extract a circle which corresponded to the face of a person, but Kinjo fails to teach or suggest cutting out the image of a face of a person from the image data. The actual face is cut out according to claim 24, not a shape

which is similar to the shape of a face. For at least this reason, Kinjo fails to teach or suggest the features of claim 24.

Claim 27 is allowable because it is a method claim which recites substantially the same features recited in claim 23. Claim 28 is a computer-readable medium claim which recites substantially the same features recited in claim 23, and is therefore allowable for the same reasons claim 23 is allowable.

For the foregoing reason, appellants respectfully request that the 35 USC 102(e) rejection of claims 23, 24, 27 and 28 be reversed.

VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A. As indicated above, the claims in Appendix A include the amendments filed by appellants on April 12, 2007.

IX. EVIDENCE

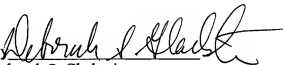
No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above, or copies of decisions in related proceedings are not provided, hence no Appendix is included.

Dated: September 17, 2007

Respectfully submitted,

By 

Deborah S. Gladstein

Registration No.: 43,636

MORRISON & FOERSTER LLP

1650 Tysons Blvd, Suite 400

McLean, Virginia 22102

(703) 760-7753

APPENDIX A**Claims Involved in the Appeal of Application Serial No. 10/040,379**

23. An image data retrieval apparatus comprising:
a database for registering a plurality of images;
a display unit for displaying an image registered in the database;
a designator for designating an image area of the registered image displayed on the display unit; and
a controller for cutting out image data corresponding to the designated image area of the registered image and retrieving a desired image data containing image data which is identical or analogous to the image data cut out from the database.

24. The image data retrieval apparatus of claim 23, wherein the image corresponding to the image area is an image of a face of a person.

27. An image data retrieval method comprising:
registering a plurality of images in a database;
displaying an image registered in the database on a display unit;
designating an image area of the registered image displayed on the display unit;
cutting out image data corresponding to the designated image area of the registered image;
and
retrieving a desired image containing image data which is identical or analogous to the image data cut out from the registered image.

28. A machine-readable medium having program code stored thereon which, when executed by a machine, causes the machine to perform a method for retrieving image data from an image database, the method executed by said machine comprising:
registering a plurality of images in a database;
displaying an image registered in the database on a display unit;

designating an image area of the registered image displayed on the display unit;
cutting out image data corresponding to the designated image area of the registered image;
and
retrieving a desired image containing image data which is identical or analogous to the
image data cut out from the registered image.